

On file, OMB release instructions apply

The Honorable William E. Colby  
Director of Central Intelligence  
Washington, D.C. 20505

Dear Bill:

I appreciate the copy of the Report on the Community On-Line Intelligence System (COINS) performed under the auspices of the IRAC by the Assistant Secretary of Defense (Intelligence). As you know, PFIAB, OMB and many elements of the intelligence community have long felt that certain aspects of the concept needed authoritative resolution. As a result of deliberations during the FY 1973 budget review and the inadequate proposals at that time, the Deputy Secretary of Defense reduced requested NSA and DIA funding and concurred in the community-wide development of a plan that would seek to insure that the various intelligence data handling systems are compatible, that appropriate files are distributed, that a meaningful allocation of executive responsibilities for file development and maintenance is assigned and that the system be community-wide in concept to include State and CIA.

25X1A In recognition of the DCI's community-wide responsibilities, funds in the amount of [ ] were provided for the DCI to conduct this study and included in the 1973 President's Budget.

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The ASD/I Report to IRAC identifies many of the problems which led to Director Weinberger's request for a comprehensive study and plan. We agree with the basic thrust of its findings which identify major weaknesses in the management, completeness, and operation of the current system. We specifically endorse the report's recommendation that the system be upgraded to TK with appropriate security safeguards. In light of the formidable problems confronting COINS that are identified in the ASD/I Report, however, we believe that decisions on major new funding should be deferred.

As we discussed last week, I agree that this situation does not rise to the level of importance necessary for inclusion in the Intelligence Community Presidential objectives. However, as stated in Mr. Weinberger's letter to Director Helms of February 24, 1972, an agreed interagency plan, for a computer-based information exchange system, does need to be developed. It should address the problems identified in the ASD/I Report and the concerns raised in Mr. Weinberger's letter, as well as the funding needs associated with your recommendations. We will arrange to discuss this with [ ] and to assist in any way useful. In order for the plan and recommendations to be available prior to the President's decision on the FY 1975 Intelligence Community budget, we would appreciate the opportunity to review interagency plans prior to November 15, 1973.

Sincerely,

*Dolph Bridgewater*

B.A. Bridgewater, Jr.  
Associate Director

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## EXECUTIVE SECRETARIAT

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## Remarks:

To 7: See Mr. Colby's note. Suggest you handle distribution to ASD(I) in the interest of time. IRAC meets 1500 on 23 July.

Executive Secretary

19 July 1973

Date

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TRANSMITTAL SLIP		DATE
		1 July 73
TO: <i>WECoby</i>		
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<p><i>D/DCE/IC</i></p> <p><i>Action pls</i></p> <p><i>+ put on IRAC agenda</i></p> <p><i>CC Vo ASD(1)</i></p> <p><i>DDM+S</i></p> <p>19 JUL 1973</p>		
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FORM NO. 241  
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REPLACES FORM 35-8  
WHICH MAY BE USED.

(47)

MEMORANDUM FOR:

Here is the summary of COINS you requested.  
Perhaps you will find it useful for your meeting  
~~this afternoon~~ with Chuck Briggs.

*tomorrow 0900*

Attached to this one-page summary is a  
two sheet summary of the computer netting plan  
that is now being implemented

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(DATE)

FORM NO. 101 REPLACES FORM 10-101  
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COINS  
(Community On-Line Intelligence System)

COINS was initiated in 1965 by the DCI in response to PFIAB recommendation and NSC instruction to develop a comprehensive plan of attack on the information science and technology problem for the intelligence community. Originally, COINS was undertaken as an "experiment" to highlight major problems, common to all agencies, of information processing and data handling. Initially it was assigned as a USIB committee project. It was to provide a basis of experience leading to the development of an overall Community Information Handling System, according to the PFIAB concept.

25X1A In 1968 the DCI designated NSA as Executive Agent, with a Project Management Office and Manager [ ] at Fort Meade. Panels were established to examine problems of security, files and user assistance, and computer/communications developments. Inter-agency arrangements were handled by a Sub-System Managers panel, representing NSA, DIA, State/INR, and CIA (including NPIC). Financial support was ad hoc from agencies, principally NSA, which also provided the staff of some 12 people.

Other 1968 initiatives, expected to provide indirect assistance to COINS, included the establishment of a community Information Science Center and the transformation of the USIB Committee on Documentation (CODIB) into the Intelligence Information Handling Committee (IHC). The latter was given its first full-time chairman, who was assigned to the DCI's community staff. A revision of DCID 1/4 made IHC responsible for assisting the community to share its information handling experience and provided a central forum for coordinated attack on mutual problems.

The COINS experiment was prosecuted with only limited success prior to the fall of 1972. An initial focus, called for by the PFIAB, on biographic files as a test case proved of little practical interest. COINS suffered from lack of strong agency support. This was not forthcoming because COINS was seen as an "experiment" that was to be carried out within the limitations of existing hardware and software and through the use of whatever formatted machine files happened to have been created to serve individual agency purposes. It was further limited, and unsatisfactory to users, because it operated in a batch interrogation mode, with a TS/SI security limitation, without need-to-know controls, using existing retrieval language and data recording conventions, and depending on a central store-and-forward switch that was not always operational.

In the fall of 1972, the DCI and ASD(I) established a panel to review the total project. The report of this group, dated 1 February 1973, recommended that ASD(I) be named Executive Agent, retaining the Project Management mechanism at NSA. The DCI agreed. He also directed that COINS should be continued under IRAC auspices, and an overall financial and development plan be established.

Other recommendations of the 1 February 1973 report approved by the DCI called for upgrading the security level (accomplished by 1 June 1973);

C O N F I D E N T I A L

the establishment of a Files Review Group to expand the content of the COINS data base and improve its usability; and the development of a communication plan for internetting agency computers.

As of the end of calendar year 1973, file and communication system improvements are being implemented, and further initiatives are being planned on such technical aspects as multi-level security and a common query language for the computer communication network. The project remains under regular IRAC review.

Attached is the Executive Summary of the plan, now underway, for upgrading the COINS communication network.

Attachment

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Prepared by: AC/IHC

15 December 1973

C O N F I D E N T I A L

## 1. Executive Summary

### a. Introduction

This document is a concept paper, and is submitted in fulfillment of the NSA/DIA Terms of Reference for the Computer Netting Group (see Appendix I). It presents a method for the inter-netting of computers - initially to include computers at NSA, DIA and NPIC - to upgrade the communications support for the users of COINS (Community On-Line Intelligence System).

The upgrade of the communications support is by means of two networks - a COINS network modelled upon ARPANET techniques, and a portion of the IDHSC (Intelligence Data Handling System Communications) network. The ARPANET concept of dual communication paths throughout the COINS network and the portion of the IDHSC network providing COINS service is retained. The COINS network features high speed communication links (50 to 64 kilobit per second) and communication computers at the nodes of the network. These nodes are configured as either IMPS (Interface Message Processors) or TIPS (Terminal Interface Processors). COINS service to users in the Intelligence components of the Military Services and the Unified and Specified Commands will be by means of IDHSC.

Conceptually, there are five classes of data communication utilized in the intelligence community at present:

- Remote Job Entry
- Interactive
- Bulk Transfer of Data
- Indications and Warning
- Graphics (Line Drawing Terminals)

At present, COINS only supports a simplified version of the first - Remote Job Entry. It is required that the upgrade of the COINS communications will support both the current simplified Remote Job Entry and Interactive Communications.

### b. Objectives

The following recommendations were contained in the recent ASD(I) evaluation of the experimental COINS network. This report was approved by the DCI on 9 April 1973:

"The COINS PMO<sup>1</sup> submit a detailed plan for an upgraded system which will address the weaknesses noted in section V in a cost effective manner. Specifically to be addressed are means to eliminate

<sup>1</sup> The COINS PMO is the COINS Program Management Office



the switch, provide interactive capability to all users, and the inclusion of world-wide user hosts and participants."

This agreement for the upgrade of the communications support for the users of COINS answers part of these recommendations; specifically it:

(1) Eliminates the need for a user to have a separate remote terminal for each computer system in the intelligence community to which he is authorized access.

(2) Eliminates the present central store-and-forward switch at DIA (the 360/30) which:

(a) Is a single point of failure in the present COINS network.

(b) Represents an annual rental cost of more than \$160,000 per year.

(c) Restricts COINS to batch interrogations vice interactive.

(3) Provides at least one alternative communication path for each major node.

(4) Permits the addition of interactive information systems to COINS. The ASD(I) report identified a number of information systems which should be included in the upgrade of COINS; many of these are interactive:



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(5) Provides for the inclusion of "world wide hosts and participants".

(6) The plan is cost effective in that it makes full use of technology developed, tested, used - and paid for - by the Advanced Research Project Agency (ARPA) of the DoD.

c. Responsibilities

The COINS Project Management Office will:

- o Fund and procure the hardware and software comprising

the COINS network: the IMPS, the TIPS, the Network Control Computer, the COMSEC equipment, the hardware required to interface the IMPS and the TIPS to the Host computers, and the communication circuits.

- Fund for contractual support to install and maintain the hardware and software included in this subnet.
- Provide personnel to operate the Network Control Computer.

DIA, NPIC and NSA will:

- Provide space and facilities (e. g., power, air conditioning, etc.) for the installation of an IMP or TIP as appropriate. In addition, NSA will provide for the Network Control Computer.
- Provide personnel to operate their local IMPS and TIPS
- Write the software required to interface their respective Host computer(s)<sup>1</sup> to their IMP or TIP.
- Implement whatever changes to the current COINS Host-to-Host protocol as are necessary (e.g., remove all activity concerning the SWITCH, adjust message buffer size, etc.)

DIA has management responsibility for:

- Interfacing the IDHSC network to the COINS network, except for the hardware interface between the IMP and IDHSC communications computer interfacing to the COINS network as a Host computer, as provided above.
- Procurement, installation, and maintenance of unique hardware and software concerned with IDHSC.
- Providing secure communication facilities and protocol to COINS users in IDHS - initially CINPAC and CONAD.
- Hardware (other than that to interface to the IMPS and/or TIPS), software and protocol required to provide COINS support to the Intelligence components of the Military Services and the Unified and Specified Commands
- For maintaining COINS service to COINS users in the

1. The DIA Host computer referred to is an IAS system, described below in section 4.b.

Intelligence components of the Military Services and the Unified and Specified Commands if the upgrade of IDHSC has not been completed when the COINS network has been declared operational

d. Outline of Report

The report begins with a description of the present COINS network and a presentation of the need for its replacement. This is followed by descriptions of available technology which can be capitalized upon to build the proposed network at minimum cost, within a minimum time period:

- The ARPANET, which is an operational, state-of-the-art network.
- IAS (Interactive Analysis Station), a computer system being developed for intelligence data processing in a network environment.
- The digital communication services, including the TETRA-HEDRON Network, available in the Washington D. C. area.

A concept for implementation is outlined. This implementation requires a set of discrete tasks grouped in implementation phases. The COINS network is to be operational in a minimum time period.

e. Status

The present COINS network will continue to operate and to provide service while the upgraded communication system is being implemented. The transition from the present network to the upgraded network must be achieved with minimum degradation of service to operational users.